

[illegible]

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Title Line One ::	AFFILIATE MARKETING SEARCH FACILITY FOR
Title Line Two ::	RANKING MERCHANTS AND RECORDING REFERRAL
	COMMISSIONS TO AFFILIATE SITES BASED UPON
	USERS' ON-LINE ACTIVITY
Total Drawing Sheets ::	14
Formal Drawings ::	
Application Type ::	Utility
Docket Number ::	12110
Licensed - U S Government Agency ::	
Contract Number ::	
Grant Number ::	
Secrecy Order in Parent Application ::	

**Representative Customer Number :: 27082**

## Continuity Information

that the  $\mathcal{H}_\infty$  norm of the closed-loop system is bounded by  $\gamma$  and that the  $\mathcal{H}_2$  norm of the closed-loop system is bounded by  $\beta$ . In this paper, we consider the problem of finding the optimal controller that minimizes the  $\mathcal{H}_\infty$  norm of the closed-loop system subject to the constraint that the  $\mathcal{H}_2$  norm of the closed-loop system is bounded by  $\beta$ . This problem is known as the  $\mathcal{H}_\infty/\mathcal{H}_2$  control problem. The optimal controller is given by the following theorem.